

IN THE CLAIMS:

Claims 20-29, 40 and 43 have been amended. Claims 41 and 42 have been currently canceled.

1. (previously presented) A system, comprising:

a multilink data connection, containing a set of individual links given a credit value based on speed of data transmission and current level of data traffic for each link;

a transmitter to send data units over the multilink data connection, wherein each data unit is sent over the link having the largest credit value among the set of individual links and the credit value is reset in response to a predetermined event; and

a receiver to receive data units over the multilink data connection.

2. (original) The system of claim 1, wherein an initial credit value is equal to data capable of being sent over the link in the set period of time.

3. (original) The system of claim 2, wherein a current credit value is equal to the initial credit value minus data currently being transmitted.

4. (original) The system of claim 3, wherein the current credit value is reset to the initial credit value originally given.

5. (original) The system of claim 1, wherein reset occurs when all the links have a current credit value of zero.

6. (original) The system of claim 1, wherein reset occurs when a link has a negative current credit value.

7. (original) The system of claim 1, wherein reset occurs when a preset time period has passed.

8. (previously presented) The system of claim 3, wherein the data units are data frames, and wherein, if two links have the same current credit value, the data frame is sent over the link that has a slower speed of data transmission.

9. (canceled)

10. (previously presented) A method, comprising:

determining a rating of a link in a multilink data connection based on an amount of data that can be transmitted across the link in a set period of time;

assigning an initial credit value to the link based on the rating;

producing a current credit value by reducing the initial credit value proportionate to an amount of data currently being transmitted on the link;

assigning a data unit to be transmitted across the link based on the current credit value; and

transmitting the data unit across the link.

11. (original) The method of claim 10, wherein the initial value equals the number of bytes of data.

12. (previously presented) The method of claim 10, wherein the data units are data frames, and wherein the data frame is sent over the link that has a credit value greater than the credit value of other links in the multilink data connection.

13. (previously presented) The method of claim 10, wherein the data units are data frame fragments, and further including reducing the current credit value after the data frame fragment is sent across the link.

14. (original) The method of claim 13, wherein the current credit value is reduced based on the size of the frame sent.

15. (original) The method of claim 10, further including resetting the current credit value to the initial credit value.

16. (original) The method of claim 15, wherein reset occurs when all the links have a current credit value of zero.

17. (original) The method of claim 15, wherein reset occurs when a link has a negative current credit value.

18. (original) The method of claim 15, wherein reset occurs when a preset time period has passed.

19. (previously presented) The method of claim 12, wherein, if no single link has a current credit value greater than any other link, the data frame is assigned to the link with a slower speed of data transmission than other links with an equal credit value.

20. (currently amended) A ~~machine-~~ computer readable storage medium tangibly ~~embodying a sequence of instructions executable by the machine~~ encoded with instructions capable of being executed by a computer to perform a method comprising:

determining a rating of a link in a multilink data connection based on an amount of data that can be transmitted across the link in a set period of time;

assigning an initial credit value to the link based on the rating;

producing a current credit value by reducing the initial credit value proportionate to an amount of data currently being transmitted on the link;

assigning a data unit to be transmitted across the link based on the current credit value; and

transmitting the data unit across the link.

21. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 20, wherein the initial value equals the number of bytes of data.

22. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 20, wherein the data units are data frames, and wherein the data frame is sent over the link that has a credit value greater than the credit value of other links in the multilink data connection.

23. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 20, wherein the data units are data frame fragments, and further including reducing the current credit value after the data frame fragment is sent across the link.

24. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 23, wherein the current credit value is reduced based on the size of the frame sent.

25. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 20, further including resetting the current credit value to the initial credit value.

26. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 25, wherein reset occurs when all the links have a current credit value of zero.

27. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 25, wherein reset occurs when a link has a negative current credit value.

28. (currently amended) The ~~machine-readable storage medium~~ computer readable medium of claim 25, wherein reset occurs when a preset time period has passed.

29.(currently amended) The ~~machine-readable-storage-medium~~ computer readable medium of claim 20, wherein, if no single link has a current credit value greater than any other link, the data frame is assigned to the link with a slower speed of data transmission than other links with an equal credit value.

30.(previously presented) An apparatus, comprising:

means for determining a rating of a link in a multilink data connection based on an amount of data that can be transmitted across the link in a set period of time;

means for assigning an initial credit value to the link based on the rating;

means for producing a current credit value by reducing the initial credit value proportionate to an amount of data currently being transmitted on the link;

means for assigning a data unit to be transmitted across the link based on the current credit value; and

means for transmitting the data unit across the link.

31.(original) The apparatus of claim 30, wherein the initial value equals the number of bytes of data.

32.(previously presented) The apparatus of claim 30, wherein the data units are data frames, and wherein the data frame is sent over the link that has a credit value greater than the credit value of other links in the multilink data connection.

33.(previously presented) The apparatus of claim 30, wherein the data units are data frame fragments, and further including a means for reducing the current credit value after the data frame fragment is sent across the link.

34.(original) The apparatus of claim 33, wherein the current credit value is reduced based on the size of the frame sent.

35.(original) The apparatus of claim 30, further including a means for resetting the current credit value to the initial credit value.

36.(original) The apparatus of claim 35, wherein reset occurs when all the links have a current credit value of zero.

37.(original) The apparatus of claim 35, wherein reset occurs when a link has a negative current credit value.

38.(original) The apparatus of claim 35, wherein reset occurs when a preset time period has passed.

39.(previously presented) The apparatus of claim 32, wherein, if no single link has a current credit value greater than any other link, the data frame is assigned to the link with a slower speed of data transmission than other links with an equal credit value.

40.(currently amended) An apparatus, comprising:

a receiver to receive data units over a multilink data connection;

and

a transmitter to send data units over the multilink data connection, the multilink data connection containing a set of individual links given a set of credit values based on speed of data transmission and current level of data traffic for each link, wherein the set of credit values includes an initial credit value equal to data capable of being sent over the link in a set period of time and a current credit value equal to the initial credit value minus data currently being transmitted, and wherein if two links have the same credit value, a data unit is sent over the link that has a slower speed of data transmission.

41. (canceled)

42. (canceled)

43. (currently amended) The apparatus of claim [[42]] 40, wherein the current credit value is reset to the initial credit value originally given.

44. (original) The apparatus of claim 43, wherein reset occurs when all the links have a current credit value of zero.

45. (original) The apparatus of claim 43, wherein reset occurs when a link has a negative current credit value.



46. (original) The apparatus of claim 43, wherein reset occurs when a preset time period has passed.

47. (canceled)

48. (previously presented) The apparatus of claim 40, wherein the data units are data frames, and wherein the data frame is sent over the link with the current credit value that is largest.

49. (previously presented) A method, comprising:

- determining a rating of a link in a multilink data connection based on an amount of data that can be transmitted across the link in a set period of time;

- assigning an initial credit value to the link based on the rating;

- producing a current credit value by reducing the initial credit value proportionate to an amount of data currently being transmitted on the link;

- assigning a data unit to be transmitted across the link based on the current credit value;

- transmitting the data unit across the link;

- reducing the current credit value after the data unit is sent across the link; and

- resetting the current credit value to the initial credit value.

50. (previously presented) The system of claim 1, wherein the data units are data frame fragments.

51. (previously presented) The system of claim 40, wherein the data units are data frame fragments.

52. (previously presented) The system of claim 49, wherein the data units are data frames.

53. (previously presented) The system of claim 49, wherein the data units are data frame fragments.